FIG. 1

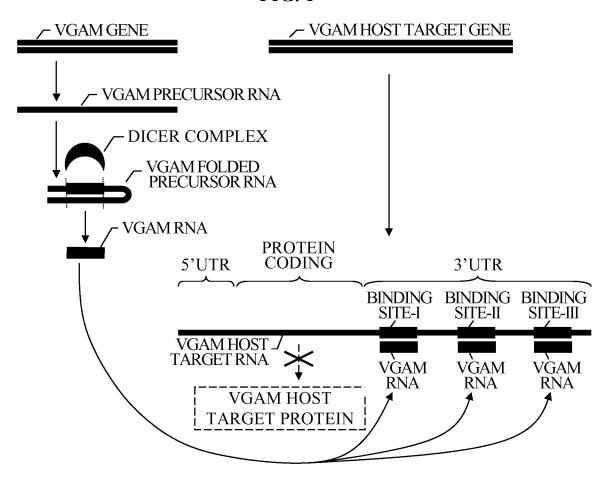
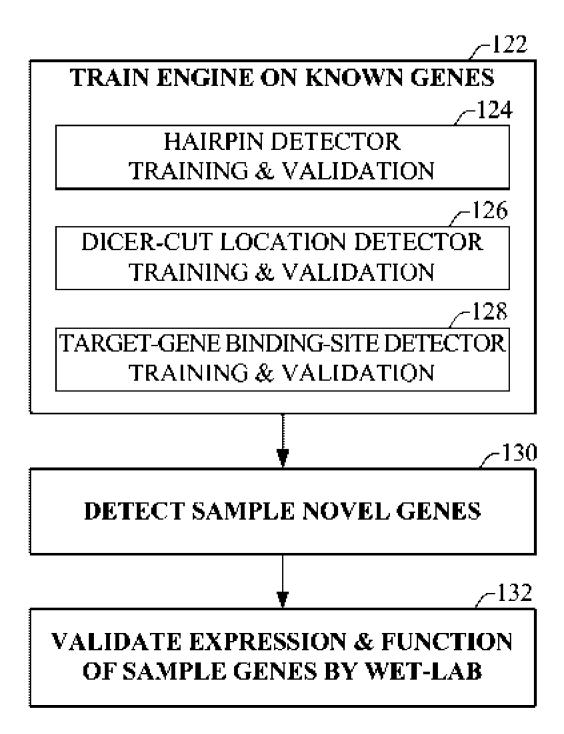


FIG. 2 -102-104-106EXPRESSED SEQUENCED PROTEIN RNA DATA DNA DATA FUNCTION DATA -110 BIOINFORMATIC -100 GENE DETECTION BIOINFORMATIC GENE DETECTION **ENGINE ENGINE** -112 TRAINING & NON-CODING GENOMIC VALIDATION SEQUENCE DETECTOR -114 **HAIRPIN** DETECTOR -116 DICER-CUT LOCATION **DETECTOR** -118 TARGET-GENE BINDING-SITE DETECTOR 120**FUNCTION & UTILITY ANALYZER** -108 BIOINFORMATICALLY DETECTED GROUP OF NOVEL VIRAL GENES

FIG. 3



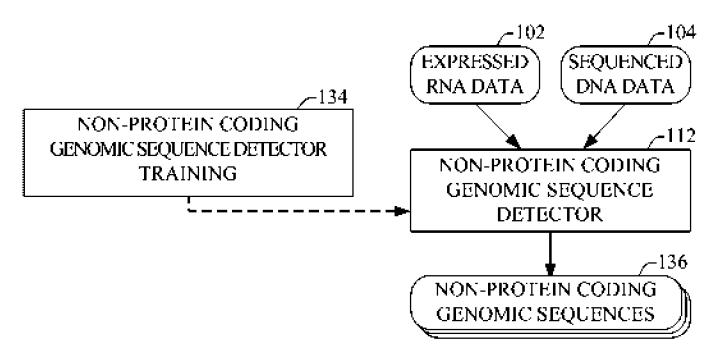


FIG. 4B

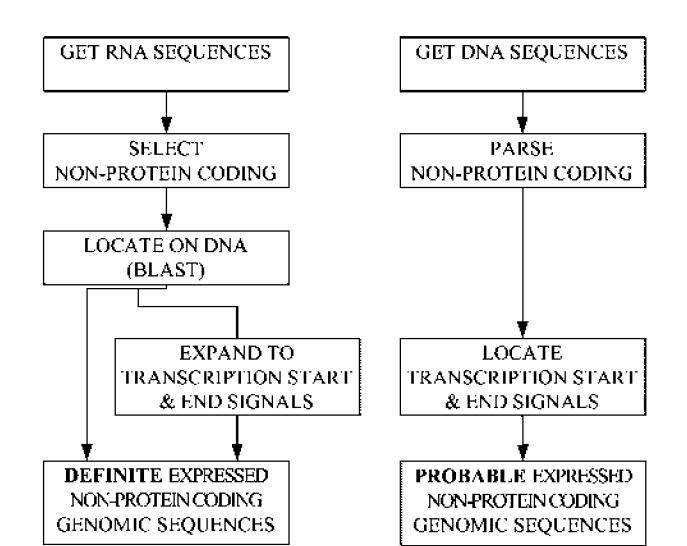


FIG. 5A

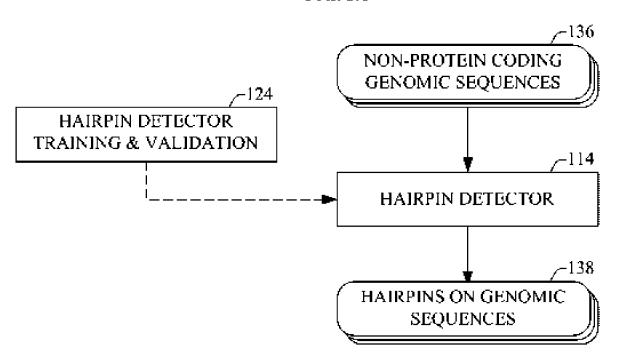


FIG. 5B

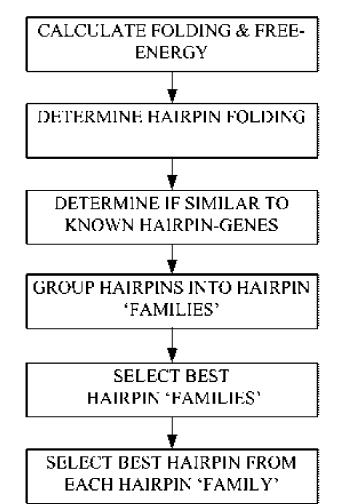


FIG. 6A

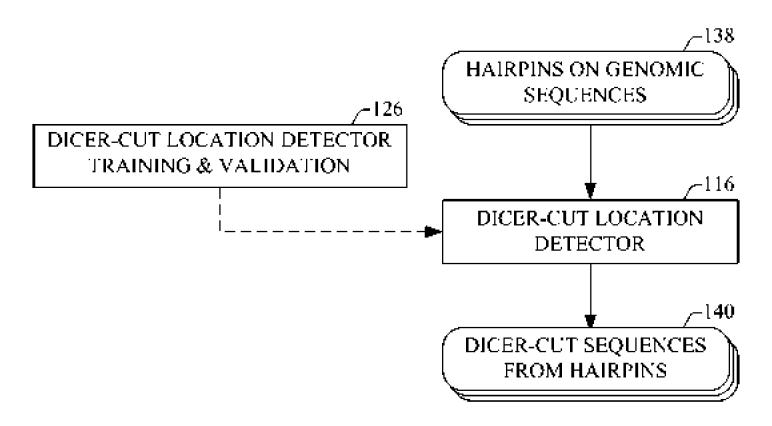


FIG. 6B

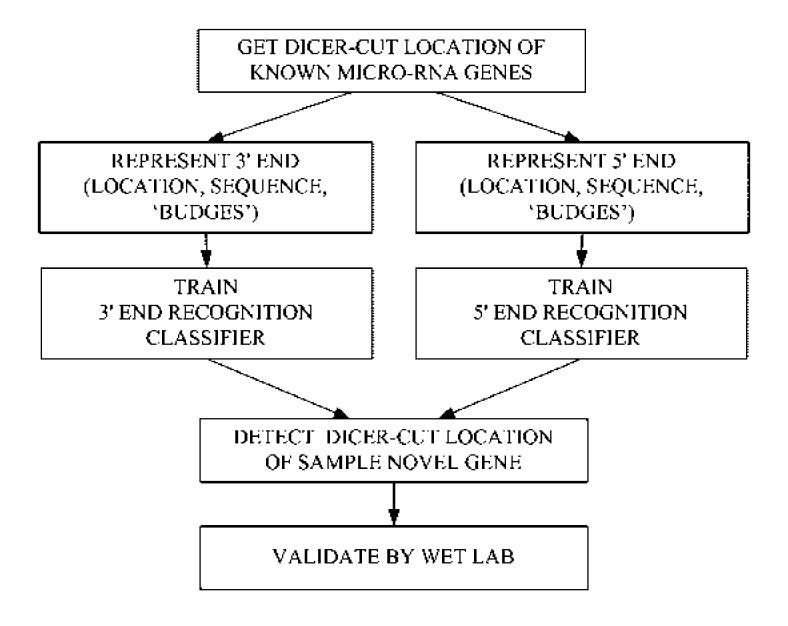
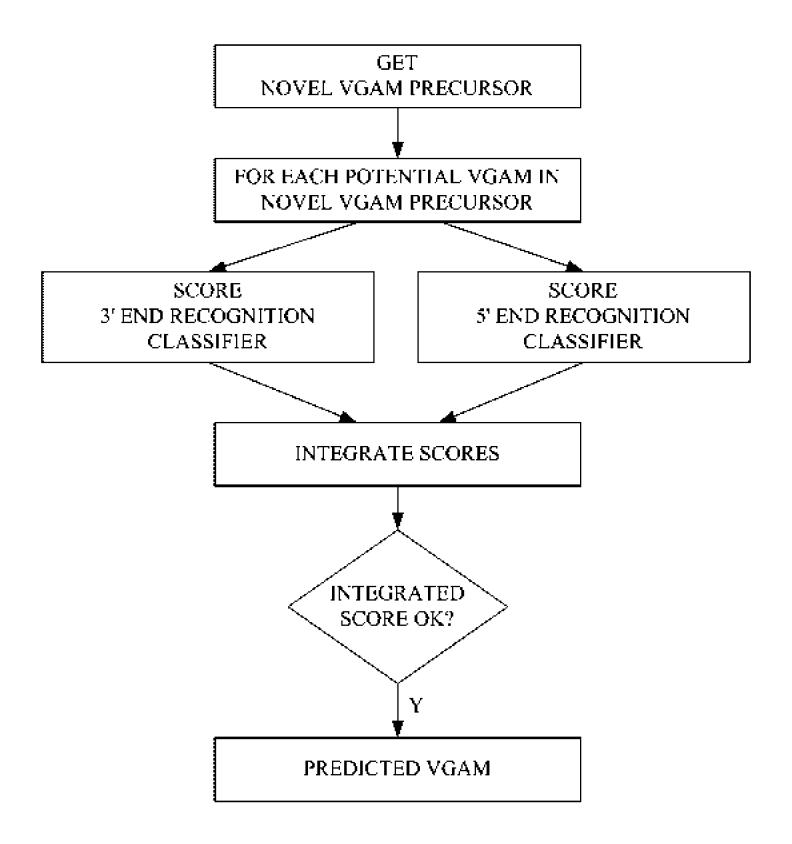


FIG. 6C



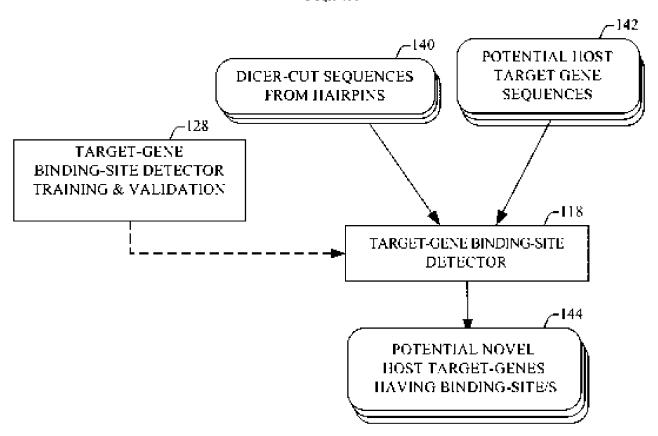


FIG. 7B

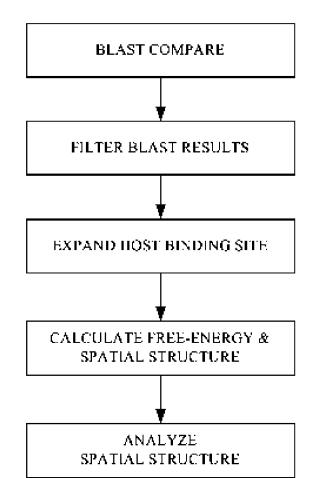
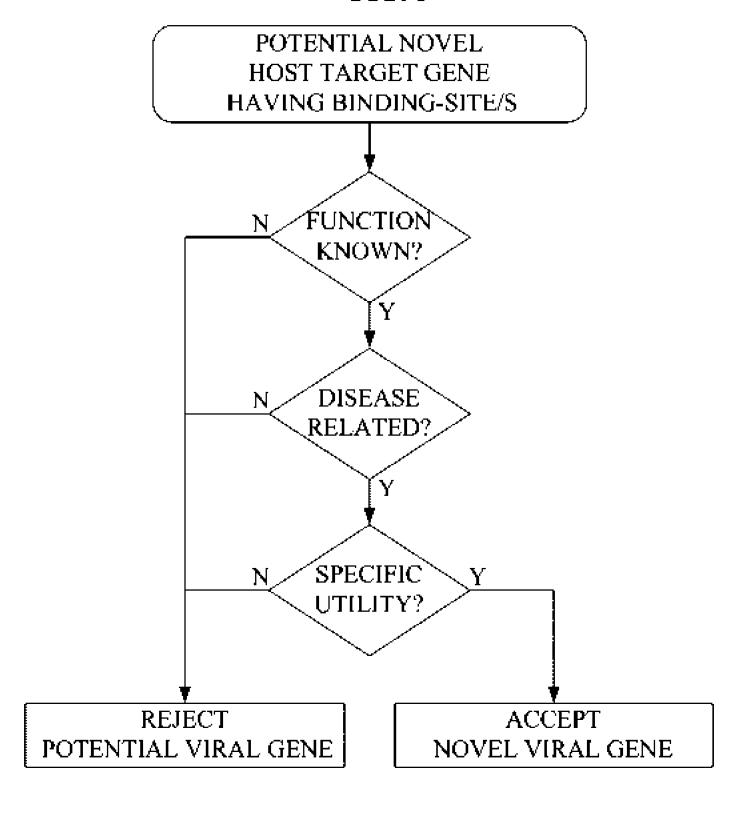
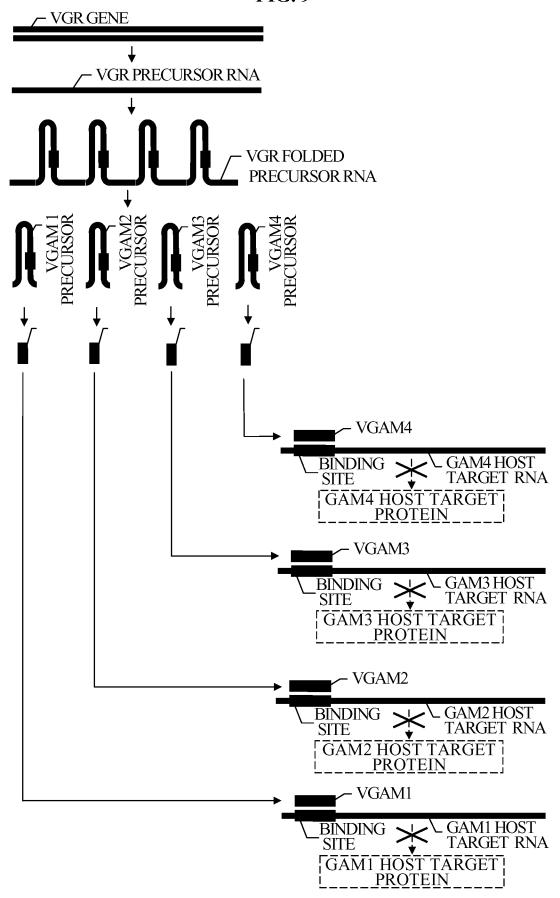
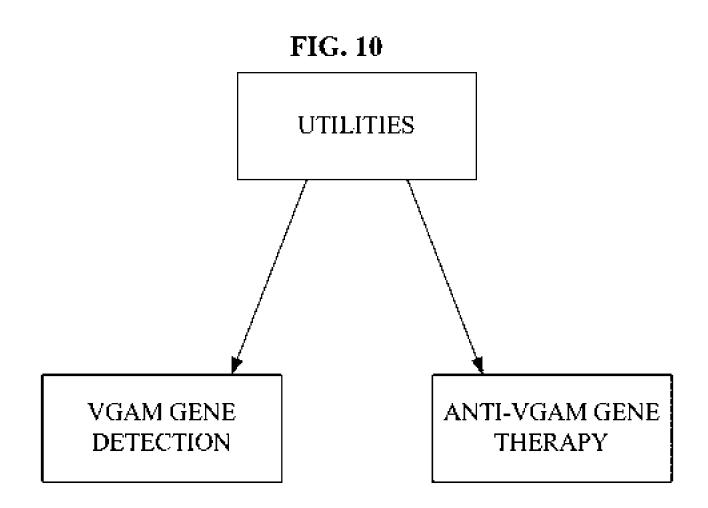
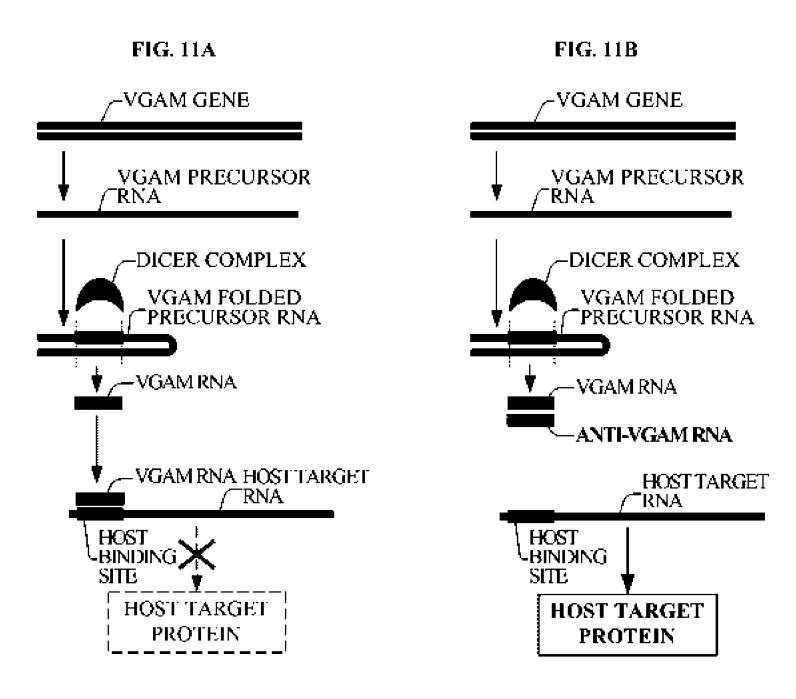


FIG. 8









EST72223 sequence:

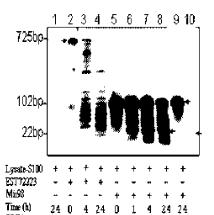
FIG. 12A

CCCTTATTAGAGGATTCTGCTCATGCCAGGGTGAGGTAGTAAGTTGT ATTGTTGTGGGGTAGGGATATTAGGCCCCAATTAGAAGATAACTAT ACAACTTACTACTTTCCCTGGTGTGTGGCATATTCACACTTAGTCTTA GCAGTGTTGCCTCCATCAGACAAAGTTGTAGATGTTCCTTGGATAATT TGGACTGGAAGAAAAGAGACATGGAAGGGGACAGATGGTGTTTAGG GTGAGGCAGATGTCATTATAAAGTGACTTGTCTTTCATTAATTGGAGC ATATAATTATTTTACCTTTGGGCATGAACTCATTTTGCTATTCTTCAAC TGTGTAATGATTGCATTTTATTAGTAATAGAACAGGAATGTGTGCAAG GGAATGGAAAGCATACTTTAAGAATTTTGGGCCAGGCGCGGTGGTTC ATGCCTGTAATCCCAGCATTTTTGGGAGGCCGAGGCGGGTGGATCA CCTGAGGTCAGGAGTTCGAGACCAACCTGGCCAACACGGCGAAACC CCGCCTCTACTCAAATACAAAAATTAGCCAGGCTTGGTGACACTCGC AG

MIR98

GAM24

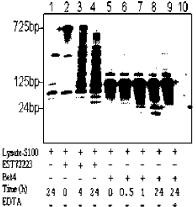




EDTA



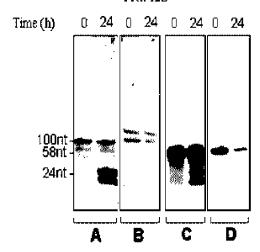
FIG. 12C



GAM24

MIR98

FIG. 12D



dbEST Id. 7929020 (Image4514344) sequence:

TETTTENCANACETERSANANCANGEARTIGGGANAGGATTECETATTTANTA
AATGGTGCTGGGAAAACTGACTAGCCATATGTAGAAAGCTGAAACTGGATCCCT
TCCTTACACCTTATACAAAAATCAATTCAAGATGGATTAAAGATTTAAACGTTA
GACCTANAACCATANAAACCCTAGAAAAAACCCTAGGCATTACCATTCAGGACA
TAGGCATGGGCAAGGACTCATGTCCAAAACACCAAAAGCAATGGCAACAAAAG
ACAAAATTGACAAATGGGATCTAATTAAACTAAAGAGCTTCTGCACAGCAAAAG
ANACTACCATCAGAGTGAACAGGCAACCTACAAATGGGAGAAAATTTTCGCAA

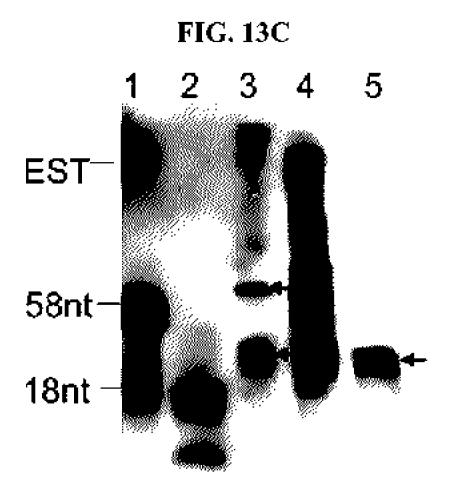
AAASTASSA<u>TCAGAGTGAACAGGCAACCTACAAAATGGGAGAAAATTTTCGCAA</u>CCTACTCATCTGACAAACGGGCTAATATSCAGAATGTACAATGAACTCAAACAAA

TTTACAAAAAAAAAAAAAA

GAM2 5

FIG. 13B





GAM25

FIG.14A dbEST Id.1388749 (Image1020185) Sequence:

ACTOCTATOAACAGTGTAAAAGCATTCCTGTTTCTCCATAATCTTGCCAGCATCTT TTCATTTTTTTGAATTATAGCCATTCTGACTGTTGTGAGATGGTGTCTCATTGTGG ${ t TGCATGTATGCCTTCTTTTGAAAAGTGTCTGTTTTGTGTCCTTTTGACCACTTTCTAA$ ${ t TGGGGTTGAGTTTTTTTTTTTGTTAAATTTGTTTAAGTTCCTTGTAGATGCTGGAT$ ATTAGACCTTTGTCAGATGGATAGAGTGCAAAAATTTTCTCCCCATTCTGTAGGTTG ${ t TCGGTTTACTCTGTTGATAGGTTCTTAATGCTGTGCAGAAGCTCTTTAGTTTAATT$ AGATCCCATTTGTCAATTTTGGCTTTTGTTGCAATTGCTTTTGGCATCTTCGTCAT GAAATCTTTGCCCTTGCCTGTGTCCTGAATGGCATTGCCTAGGTTTTCTTCCAGGA TTTTTATAGTTTTGGGTTGTAGATTTAAGTCTTTAATCCATCTTGAGTTAACTTTT GTATATGGGTTAAGGAAGGGGCCCGTTTCAATTTGCTGCAAATGGCTAGCCAGTTC ${\tt TCCCAGCACCATTTATTAAATAGGGAATCTTTTCCCCCATTGCTTCCTTTTGTCAGG$ ${ t TTTGTCAAAGATCACATGGTTGTAGGTGTGTGTCTTATTTCTGGGTTCTCTATTC$ TGTTCCATTGGGCTATGGGCCGGTTCTGTACCACCACTATGCTGTTTTGGGTACCA TAGTCTTGTAGAATGTTTGAAGCTGGGTAGCATGATGCCTCTAGCTTTGCTCTTCT ${ t TGCTAAGAAATGTCTTGGCTATTTGGGCTCTTTTTTGGTTCCATATGAATTTTAAA$ ATAGCTTTTTCTAGGTCTGTAAAGAATGTGAATAGTAGTTTAATGGGCCTAGCATT TCTGTGAGCATATGTTT**TTCCATTTGTTTGTCATCTCTGATTTCTTTGAATAAT** GGTTTATAGTTATCCTTGAAAAGGTCCTTCACTTTTCTTGTTAGCTGTATTCCTAG ATATTATACTCTTCTTGTGGCAATTGTGAATGGGAGTTAATTCATGAGTTTTCTCT CGGCTTGCCTGTTGTTGGTGTATAGGAATGCTAGTGACTTTTGCACATTGATTTTG TATCCTGAGACTTTGTTGAAGTTGCTTATCAGCTAAGAAGTTTTTTGAGCTGAGATG CTGTCTTCCTATTTGAATAGCTTTTCTTTCTTTCTTTGCCTGATTGCCTTGGTGA GAATTTCTAATACTGTGTTGAATAGGAGTGGTGAGCTCGTGCCAA

GAM 26

